

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,269	09/10/2003	Takeshi Sasaki	11884/405201	4022
23838 KENYON & K	7590 09/25/2007 ENYON LLP	7	EXAM	INER
1500 K STREET N.W. SUITE 700			HOANG, HIEU T	
WASHINGTON	N, DC 20005		ART UNIT	PAPER NUMBER
			2152	
			MAIL DATE	DELIVERY MODE
			09/25/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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		Application No.	Applicant(s)	
Office Action Summary		10/658,269	SASAKI ET AL.	
		Examiner	Art Unit	
		Hieu T. Hoang	2152	
Period fo	The MAILING DATE of this communication ap or Reply	pears on the cover sheet v	vith the correspondence address	
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLICATION OF THE MAILING INSTRUMENT OF	DATE OF THIS COMMUN .136(a). In no event, however, may a d will apply and will expire SIX (6) MO te, cause the application to become a	ICATION. In reply be timely filed ENTHS from the mailing date of this communication. ABANDONED (35 U.S.C. § 133).	
Status				
1)⊠	Responsive to communication(s) filed on 06 A	<u> August 2007</u> .		
2a)⊠	This action is FINAL . 2b) Thi	is action is non-final.		
3)	Since this application is in condition for allows closed in accordance with the practice under	•		
Disposit	ion of Claims			
5)□ 6)⊠ 7)□	Claim(s) <u>2-9,11-17 and 26-28</u> is/are pending 4a) Of the above claim(s) is/are withdra Claim(s) is/are allowed. Claim(s) <u>2-9,11-17 and 26-28</u> is/are rejected. Claim(s) is/are objected to.	awn from consideration.		
	Claim(s) are subject to restriction and/	or election requirement.		
	ion Papers			
,	The specification is objected to by the Examin			
10)[_]	The drawing(s) filed on is/are: a) ac	· · · · · · · · · · · · · · · · · · ·	•	
	Applicant may not request that any objection to the Replacement drawing sheet(s) including the corre-	*	• • • • • • • • • • • • • • • • • • • •	
11)	The oath or declaration is objected to by the E	· .		
Priority	under 35 U.S.C. § 119			
a)	Acknowledgment is made of a claim for foreig All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureause the attached detailed Office action for a list	nts have been received. Its have been received in ority documents have been au (PCT Rule 17.2(a)).	Application No n received in this National Stage	
Attachmer	nt(s) ce of References Cited (PTO-892)	A) ☐ Interview	y Summary (PTO-413)	
2) Notice	ce of References Cited (P10-692) ce of Draftsperson's Patent Drawing Review (PT0-948) mation Disclosure Statement(s) (PT0/SB/08) er No(s)/Mail Date	Paper No	o(s)/Mail Date i Informal Patent Application	

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DETAILED ACTION

1. This office action is in response to the amendment filed on 07/23/2007.

- 2. Claims 26, 27 and 28 have been cancelled.
- 3. Claims 2-9, 11-17, 19-28 are pending and presented for examination.

Response to Arguments

4. Applicant's arguments have been fully considered but are moot in view of new ground(s) of rejection.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 2-9, 11-17 and 19-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simons (Understanding Active Directory Replication, pages 171-180, http://searchwinit.techtarget.com/searchwin2000/downloads/pdfs/ImplementingtheAD20 2014.pdf), in view of Ericsson et al. (SyncML Sync Protocol, version 1.0.1, http://www.openmobilealliance.org/tech/affiliates/syncml/syncml protocol v101 200106

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15.pdf, pages 1-17 and 26-50, hereafter Ericsson), further in view of Lambert et al. (US 6,038,601, hereafter Lambert) and Wang (US 2004/0019614)

26. For claim 26, Simons discloses a method for synchronizing data between a network server and a mobile device, comprising:

responsive to a replication request received from the network server, replicating
an object instance, and queuing the object instance (p. 172, fig. 14.1, in response
to a change notification from the originating server, an update request is used to
replicate (and store) object instances);

Simons does not disclose creating and queuing a notification message.

Ericsson discloses creating and queuing a notification message (fig. 10, Package 0 sync alert from server to client); and also sending the notification message to the mobile device (fig. 10, Package 0 sync alert from server to client)

Simons-Ericsson does not disclose:

responsive to a periodic polling request received from the mobile device, sending the notification message to the mobile device;

However, Lambert discloses responsive to a periodic polling request received from the mobile device, sending the notification message to the mobile device (col. 26, lines 42-45, a client polls a server to see if content has been changed, then change notification message is used to response to the client)

Simons-Ericsson-Lambert further discloses:

responsive to a synchronization request received from the mobile device
(Ericsson, fig. 9, package 3, sync request from client to server), sending
synchronization data to the mobile device (Ericsson, fig. 9 package 4, server
sends sync package to client)

Simons-Ericsson-Lambert does not explicitly disclose the synchronization data includes the replicated object instances.

However, Wang discloses synchronization data includes the replicated object instances (fig. 1, [0032], [0033], when the PIM server adapter 132 receives the synchronization messages from the client device 100, it collects server delta messages from the mid-tier replicated database136 and prepares the reply messages ready to be sent back to the client device, server delta messages are replicated data change (or replicated object instance) of the source messaging server 104).

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Simon, Ericsson, Lambert and Wang in order to implement a simple, optimized and generic method for detecting all possible synchronization conflict using a mid-tier server with a replicated database to avoid performance problem (Wang, [0008], [0007] lines 10-14).

7. Claims 27 and 28 are rejected for the same rationale as in claim 26.

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8. For claims 2, 11, and 19, Simons-Ericsson-Lambert-Wang discloses the invention as in claims 26, 27 and 28. Simons-Ericsson-Lambert-Wang further discloses the replication request includes an object instance identifier and a mobile device identifier (Simons, p. 173, par. 2, a stamp associated with the update attribute is an object instance identifier, Wang, [0035], subscription id which defines the adapter type is read as a mobile device identifier).

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- 9. For claims 3, 12 and 20, Simons-Ericsson-Lambert-Wang discloses the invention as in claims 2, 11 and 19. Simons-Ericsson-Lambert-Wang further discloses executing a remote function call in response to the replication request (Simons, p. 172, par. 5, 6, update request is a remote function call in response to a change notification or a replication request from the originating server, Wang, fig. 1, [0033], PIM server adapter invokes the scheduled PIM replication service 134 to replicate the message content).
- 10. For claims 4, 13, and 21, Simons-Ericsson-Lambert-Wang discloses the invention as in claims 26, 27 and 28. Simons-Ericsson-Lambert-Wang further discloses said replicating the object instance includes: requesting updated data associated with the object instance from the network server; receiving the updated data associated with the object instance from the network server; and storing the updated data associated with the object instance in a replica database (Simons, p. 172, par. 3, only changes are replicated, Wang, fig. 1, requesting, receiving and, storing the changed replicated data is done between the mid-tier replicated database and the source messaging server via

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a scheduled PIM replication service, [0033], PIM server adapter invokes the scheduled PIM replication service 134 to replicate the message content).

- 11. For claim 5, Simons-Ericsson-Lambert-Wang discloses the invention as in claim
 4. Simons-Ericsson-Lambert-Wang further discloses said requesting updated data
 includes executing a remote functions call, including an object instance identifier, on the
 network server (Simons, p. 172, update request is a remote function call, p. 173 par. 2,
 a stamp is attached to an updated attribute or an instance so it can be updated, Wang,
 fig. 1, [0033], PIM server adapter invokes the scheduled PIM replication service 134 to
 replicate the message content or to execute a remote function call on the source
 messaging server).
- 12. For claims 6, 14 and 22, Simons-Ericsson-Lambert-Wang discloses the invention as in claims 4, 13, and 21. Simons-Ericsson-Lambert-Wang further discloses said sending the replicated object instance to the mobile device includes sending only the updated data associated with the object instance to the mobile device (Simons, p. 173, par. 2, originating update from the originating server is replicated to the other servers, p. 172, par. 3, only changes are replicated, Wang, [0039], sending to the client or mobile device only new messages, Ericsson, section 5.2, page 38, data modification (replace, delete, add) in the synchronization server is sent to the client).

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13. For claims 7, 15, and 23, Simons-Ericsson-Lambert-Wang discloses the invention as in claims 5, 13, and 22. Simons-Ericsson-Lambert-Wang further discloses sending a replication acknowledgement message to the network server in response to said storing the updated data (it is well known in the art how to use an ACK message to notify that an operation is successful).

- 14. For claims 8, 16, and 24, Simons-Ericsson-Lambert-Wang discloses the invention as in claims 26, 27 and 28. Simons-Ericsson-Lambert-Wang further discloses said replicating an object instance includes deleting the object instance from a replica database (Wang, fig. 5, deleted mirror message).
- 15. For claims 9, 17, and 25, Simons-Ericsson-Lambert-Wang discloses the invention as in claims 26, 27 and 28. Simons-Ericsson-Lambert-Wang further discloses said replicating an object instance includes adding a new object instance to a replica database (Wang, fig. 5, updated mirror message).

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Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Immerman et al. US 6,574,617. Selective replication of database.
- Blanco et al. US 2004/0230619. Update dependency control for multi-master replication.
- Piispanen et al. US 2003/0191827. Synchronizing how data is stored.
- Mettala et al. US 2004/0215669. Application data synchronizing.
- Hansmann et al. US 2005/0228812. Accessing different types of backend data stores.
- Bogantz et al. US 6,243,715. Replicating database synchronization method.
- 17. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).
- 18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hieu T. Hoang whose telephone number is 571-270-1253. The examiner can normally be reached on Monday-Thursday, 8 a.m.-5 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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HH

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